

Exploratory Grants (P20) for NIBIB Quantum Projects

RFA-EB-06-001

Informational Web/Teleconference

December 12, 2005

12:30 – 3:30 PM [Eastern]

National Institute of Biomedical Imaging and Bioengineering
National Institutes of Health
Bethesda, MD

<http://nihbreeze.cit.nih.gov/r92499673/>

Welcome

- Thanks for your interest in the NIBIB Quantum Projects
- NIBIB Mission: To improve human health by leading the development and accelerating the application of biomedical technologies

Agenda

- Welcome, Review of Agenda, Review of Procedures, Introduction of Presenters - Albert Lee, Commerce Science Fellow, NIBIB – 12:30 PM Eastern
- Overview of Quantum Projects – John Haller, Scientific/Research Contact for Quantum Projects, NIBIB
- Open Session for Questions and Answers – Bill Heetderks, Associate Director, Extramural Science Programs, NIBIB
- End of Web/Teleconference – 3:30 PM Eastern

Procedures

- Dial into the teleconference to hear and participate in verbal discussions (800-619-9075, passcode is LEE). Callers are muted and unannounced.
- Click on the weblink - <http://nihbreeze.cit.nih.gov/r92499673/>
- At the “Enter as a Guest” window, enter any Name you wish, and click Enter
- This opens a Breeze Live window
- Questions can be submitted via the moderated teleconference (first come, first answered, *1) or via the Breeze Live window. Responses to all questions will be verbal via the teleconference line only.
- No more than two questions (or one question and a follow-up question) per turn. If you have more questions, please take another turn.
- If there are teleconference problems, an alternate number will be provided. For problems with Breeze, contact John Riston (ristonj@mail.nih.gov).

Web/Teleconference Goals

- Review the goals of the Quantum Projects and provide general information
- Answer as many general questions as possible. You may always send questions to John Haller, QuantumInfo@mail.nih.gov, or NIBIB program staff.

General Announcements

- This web/teleconference is a public forum. Discussions will be heard by all participants. Please do not divulge confidential information or ideas.
- This event is for information only. Names of participants are not being used and participation gives no advantage over those that did not participate.
- Highlights of the discussions, in the form of additional frequently asked questions, will be posted onto our Quantum website within two weeks.

NIBIB Quantum Projects Initiative

Teleconference and Webcast

12 December 2005

John Haller

Acting Director, Division of Applied Science and Technology
Scientific/Research Contact – Quantum Projects
National Institute of Biomedical Imaging and Bioengineering

What is a Quantum Project?

The goal of the Quantum Program is to make a profound (quantum level) advance in healthcare by

- 1) developing technological methods*
- 2) addressing a specific health care problem with a clear path to the solution.*

Emphasis is on high clinical impact, a medical “moon shot”

What are some illustrative examples* of Quantum Projects?

- Non-invasive technologies that provide blood chemistry without a needle stick
- Sensor and lab-on-a-chip devices for real-time, point-of-care identification of disease or pathogen
- System for the identification and stabilization of pre-clinical vulnerable plaque in coronary arteries
- A robust system for automated sensor-based control of insulin delivery (“closed loop system”) for treatment of diabetes
- A system that offers significant improvement in hemodialysis through increased portability and/or decreased frequency of use
- Minimally invasive, image-guided treatment for early-stage cancer in the thorax that is superior to current clinical approaches.
- Regenerative or biomimetic based cartilage repair for end-stage degenerative joint disease

*THE ILLUSTRATIONS ABOVE ARE INTENDED TO BE *EXAMPLES* ONLY.
Investigators are encouraged to think *BEYOND* THE EXAMPLES ON THE LIST.

Two Phases of Quantum Project

- Phase I
 - P20 Exploratory Grant
 - \$400-700K/yr for three years
- Phase II
 - Cooperative Agreement
 - Up to \$5M (Total Costs) per year

The goal of the Quantum Program is to make a profound (quantum level) advance in healthcare

- 1) by developing technological methods*
- 2) and addressing a specific health care problem with a clear path to the solution.*

Focused resources and science on a selected problem to make a more profound improvement – a Quantum level improvement – in health.

For more info see the www.nibib.nih.gov
Or contact hallerj@mail.nih.gov, 301.451.4780, or
QuantumInfo@mail.nih.gov

Question & Answer Session

Dr. Bill Heetderks, Associate Director,
Extramural Science Programs, NIBIB